

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,631	10/23/2003	Kazunori Yoshino	8350.3130	9159
22852	7590 08/23	2005	EXAMINER	
FINNEGAN	, HENDERSON	LOPEZ, FRANK D		
LLP				
901 NEW YC	RK AVENUE, N'	ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20001-4413			3745	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/690,631	YOSHINO, KAZU	YOSHINO, KAZUNORI			
		Examiner	Art Unit				
		F. Daniel Lopez	3745				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)	Responsive to communication(s) filed on						
2a)⊠	This action is FINAL . 2b) ☐ This	action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
•	4) Claim(s) 1-14 and 16-24 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>17-23</u> is/are allowed. 6)⊠ Claim(s) <u>1-5,7,10,11 and 24</u> is/are rejected.							
· · · · ·	7)⊠ Claim(s) <u>6,8,9,12-14 and 16</u> is/are objected to.						
	8) Claim(s) are subject to restriction and/or election requirement.						
Applicati	ion Papers						
9)☐ The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (ınder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.							
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 							
* 0	application from the International Burea	• • • • • • • • • • • • • • • • • • • •	traccived				
•	See the attached detailed Office action for a list	or the certified copies not	received.				
Attachment(s)							
	e of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) (s)/Mail Date				
3) 🛛 Infon	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 or No(s)/Mail Date 6/10/05.	_	Informal Patent Application (PT	O-152)			

Application/Control Number: 10/690,631

Art Unit: 3745

Response to Amendment

Applicant's arguments filed June July 9, 2005, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 1-5, 7, 8, 11 and 24 have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection are necessitated by newly cited art.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC ∋ 102

Claims 1, 5, 7, 11 and 24 are rejected under 35 U.S.C. ∋ 102(b) as being anticipated by EP 629,781 (see discussion below). For all of the claims, a hydraulic motor is considered to be broader than a hydraulic cylinder, since it includes both cylinder and non-cylinder type motors.

Claim Rejections - 35 USC 103

Claims 2, 4 and 10 are rejected under 35 U.S.C. 103 as being unpatentable over EP 629,781 in view of Bridwell et al. EP 629,781 discloses a hydraulic system for a work machine comprising first (5) and second (4) hydraulic motors in fluid communication with a source of pressurized fluid (1), being a single pump, via first and second directional control valves (3, 2); first and second fluid return lines adapted to direct a return flow of fluid from the first and second hydraulic actuators, respectively, to a tank (9); and a pressure control device (6) disposed in the second fluid return line and operable to selectively adjust a magnitude of fluid pressure in the second fluid return line, wherein the pressure control device increases the magnitude of the fluid pressure in the second return line in response to a decrease in the rate of fluid flow through the second return line; but does not disclose that the source of pressurized fluid includes first and second pumps; that the first hydraulic actuator is a hydraulic cylinder; or that there are a plurality of hydraulic cylinders and a plurality of hydraulic motors.

As is normal for all valves, a decrease of a pilot pressure (Pia1, Pia2) decreases the size of the throttle areas (25, 26), allowing less flow therethrough. As the pilot [pressure decreases, the current to the pressure control device increases (fig 18), causing the flow through the pressure control device to be more throttled (by 6a), thereby causing an increase in pressure in the second return line.

Bridwell et al teaches, for a hydraulic system for a work machine comprising first (e.g. 30) and second (e.g. 36 hydraulic actuators in fluid communication with a source of pressurized fluid; that the source of pressurized fluid includes first and second pumps (e.g. 42, 44); that there are a plurality of hydraulic cylinders and a plurality of hydraulic motors, wherein one of the hydraulic cylinders is the first hydraulic actuator for the purpose of controlling a variety of elements on the work machine.

Since the source of pressurized fluid and fluid actuators of EP 629,781 and Bridwell et al are functionally equivalent in the hydraulic system for a work machine art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the source of pressurized fluid of EP 629,781include first and second pumps, as taught by Bridwell et al, as a matter of engineering expediency, and to include a plurality of hydraulic cylinders and a plurality of hydraulic motors in the system of EP 629,781, wherein one of the hydraulic cylinders is the first hydraulic actuator, as taught by Bridwell et al, for the purpose of controlling a variety of elements on the work machine.

Claim 3 is rejected under 35 U.S.C.

103 as being unpatentable over EP

629,781 in view of Bridwell et al, as applied to claim 1 above, and further in view of

Stephenson et al. The modified EP 629,781 discloses all of the elements of claim 3, but
does not disclose that the first and second directional control valves include a first set of
independent metering valves adapted to control a flow of fluid between the source of
pressurized fluid and the hydraulic cylinder and to control a flow of fluid from the
hydraulic cylinder to the first fluid return line; and a second set of independent metering
valves adapted to control a flow of fluid between the source of pressurized fluid and the

hydraulic motor and to control a flow of fluid from the hydraulic motor to the second fluid return line.

Stephenson et al teaches, for a directional control valve connected between a source of pressurized fluid (102) and a hydraulic motor (110), that the directional control valve includes a set of independent metering valves (121, 122, 123, 124) adapted to control a flow of fluid between the source of pressurized fluid and the hydraulic cylinder and to control a flow of fluid from the hydraulic cylinder to a return line (119).

Since the directional control valves of EP 629,781 and Stephenson et al are functionally equivalent in the hydraulic piston control art; itwould have been obvious at the time the invention was made to one having ordinary skill in the art to use a first set of independent metering valves adapted to control a flow of fluid between the source of pressurized fluid and the hydraulic cylinder and to control a flow of fluid from the hydraulic cylinder to the first fluid return line; and a second set of independent metering valves adapted to control a flow of fluid between the source of pressurized fluid and the hydraulic motor and to control a flow of fluid from the hydraulic motor to the second fluid return line instead of the first and second directional control valves of the modified EP 629,781, as taught by Stephenson et al, as a matter of engineering expediency.

Conclusion

Claims 17-23 are allowed.

Claims 6, 8, 9, 12-14 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on June 10, 2005 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/690,631 Page 5

Art Unit: 3745

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

F. Daniel Lopez/ Primary Examiner Art Unit 3745 August 22, 2005